

Application Ser. No.: 10/721,210
Filing Date: November 25, 2003
Examiner: Davis, Zinna Northington

Remarks

In the Office Action, the Examiner noted that claims 1 to 38 are pending in the application; claims 1-8, 10-14, 16-38 are rejected; and that claims 9 and 15 are objected to. By this amendment, claims 1, 11, 16, 25, 26, 29 to 32 and 38 have been amended, and claims 10, 18, 23 and 24 have been cancelled without prejudice or disclaimer of the subject matter contained therein. Thus, claims 1-9, 11-17, 19-22 and 25-38 are pending in the application. No new subject matter has been inserted through these amendments. All of the amendments are fully supported by the specification and are further discussed in detail below. The Examiner's rejections are traversed below.

Restriction – Lack of Unity of Invention

The Examiner has made the restriction final, which was imposed in this case in her Office Action of November 16, 2004. As a result, by way of this amendment, Applicants have canceled the unelected subject matter. Specifically, claims 1-38, as amended, read upon only the elected matter. That is, a compound of formula I wherein n, m, p and q are 1; nitrogen containing aromatic ring is a quinoline or pyridine; the aromatic and nonaromatic ring is a quinoline, pyridine or phenyl; the distribution agent is a triazine group, 5- or 6-membered heterocyclic radical, phenyl or a diazine group. Accordingly, as noted above, the unelected subject matter has been deleted from claims 1, 11, 16, 25, 26, 29, 32 and 38. As a result, claims 10 and 18 did not provide any additional limitation compared with claim 1 upon which they directly or indirectly depended upon, and therefore, have been canceled without prejudice.

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 1, 23, 24, 30 and 31 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In particular, the Examiner has noted that in claim 1, line 1, the term "general" should be deleted. Claim 1 has been amended to remove the term "general" at line 1.

The Examiner further states that claims 23 and 24 are identical to claim 1. Both claims 23 and 24 have been canceled without prejudice thus rendering this rejection moot.

Finally, the extra period at the end of claims 30 and 31 have been deleted as requested by the Examiner.

In view of all of the above noted amendments, it is respectfully submitted that claims 1, 30 and 31, as amended, fully satisfy the requirements of 35 U.S.C. § 112, second paragraph. Thus, withdrawal of rejection as to claims 1, 23, 24, 30 and 31 is respectfully requested.

Rejection Under 35 U.S.C. § 102(b)

Claims 1-8, 10-14, 16-29 and 32-38 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Plumpe et al. (British Patent 1,147,295).

In particular, the Examiner alleges that the instantly claimed compounds are disclosed in Plumpe et al. In support this assertion, Examiner points to pages 1 and 2 of Plumpe, the formula contained therein, the examples at pages 4-6 and the claims of Plumpe et al.

It is respectfully submitted that instant claims 1-8, 10-14, 16-29 and 32-38 are not anticipated by Plumpe et al. In fact, the proviso provided in claim 1 specifically, disclaims all of the compounds of Plumpe et al. More specifically, the proviso as amended in independent claim 1 reads as follows:

"with the proviso that:
when the distribution agent is phenyl optionally substituted with NH₂, 2, 5-pyridyl or 2,6-pyridyl, ~~and when n, m, p and q are each 1~~ and R₃ and R'₃ are hydrogen, then the nitrogen-containing aromatic ring and the aromatic ring are not both quinoline which is unsubstituted or substituted ~~on its nitrogen atom~~ with C1-C4 alkyl."

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In addition, Applicants submit that dependent claims 2-8, 10-14, 16-29 depend directly or indirectly upon claim 1 and incorporates all of the limitations of claim 1, and further recite additional limitations. Similarly, independent claims 32 and 38, as amended, recite respectively a composition and method of treating cancer comprising a compound having the same scope as that recited in claim 16, and most importantly having a similar proviso as that reproduced above.

On the other hand, Plumpe et al. teach compounds having specifically phenyl as the distribution agent in which both the nitrogen containing aromatic ring and the aromatic ring are the same, primarily, quinoline, among others. All of such compounds were excluded from the present invention from the above noted proviso. Thus, it is respectfully submitted that compounds of the present invention as recited in claims 1-8, 10-14, 16-29 and 32-38 are not anticipated by Plumpe et al., and therefore, fully satisfy the requirements of 35 U.S.C. § 102(b). Accordingly, withdrawal of rejection as to claims 1-8, 10-14, 16-29 and 32-38 is respectfully requested.

Rejection Under 35 U.S.C. § 102(b)

Claims 1-8, 10-14, 16-18, 23 and 24 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Hiratani et al (Bull. Chem. Soc. Jpn., 63, 3331-3333 (1990)).

Specifically, the Examiner has noted that the instantly claimed compounds are disclosed by Hiratani et al, and more specifically, the Examiner points to compounds 1, 3 and 5 of Hiratani et al.

Again, Applicants respectfully submit that the proviso provided in independent claim 1, as amended, specifically disclaims all of the compounds of Hiratani et al. That is, the compounds 1, 3 and 5 of Hiratani contain 2,6-pyridyl as the distribution agent and both nitrogen containing aromatic ring and the aromatic ring to be either quinoline (compounds 1 or 5) or 2-methylquinoline (compound 3). However, as noted above, independent claim 1 specifically disclaims these compounds as provided in the proviso. In view of this, it is respectfully submitted that claims 1-8, 10-14, 16-18, 23 and 24 are

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not anticipated by Hiratani et al. Accordingly, withdrawal of this rejection as to claims 1-8, 10-14, 16-18, 23 and 24 is respectfully requested.

Rejection Under 35 U.S.C. § 102(b)

Claims 1-8, 10-14, 16-20, 23-29 and 32-38 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Denny et al. (J. Med. Chem., 1979, Vol. 22, No. 2, 134-150).

The examiner alleges that the instantly claimed compounds are disclosed by Denny et al. In particular, the Examiner points to page 136, entry nos. 54-62 and 84-88 and compound 1 at page 143 of Denny et al. However, the entry nos. 60-62 on page 136 of Denny require a quinoline substituted on its nitrogen with respectively methoxyethyl, ethoxyethyl and butoxyethyl, all of which are not claimed in the instant invention. However, entry nos. 63-66 on page 136 of Denny et al. disclose compounds where the distribution agent is phenyl substituted with $-NH_2$, which are within the scope of the present invention but are excluded by the proviso.

In addition, all of the above noted entries, namely, compound nos. 54-59 and 84-88 of Denny are also excluded by the proviso provided in independent claims 1, 32 and 38, as amended. In view of the foregoing it is respectfully submitted that claims 1-8, 10-14, 16-20, 23-29 and 32-38, as amended, are not anticipated by Denny et al., and therefore fully satisfy the requirements of 35 U.S.C. § 102(b). Thus, withdrawal of this rejection as to 1-8, 10-14, 16-20, 23-29 and 32-38 is respectfully requested.

Claim Objections

Claims 9 and 15 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims to the extent that the claims read on the examined subject matter.

However, as argued above, independent claim 1, as amended, upon which claims 9 and 15 depend directly or indirectly, is believed to be in condition for allowance.

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Therefore, it is respectfully submitted that claims 9 and 15 are also in condition for allowance. Thus, withdrawal of this objection as to claims 9 and 15 is respectfully requested.

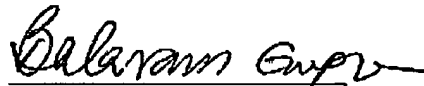
Conclusions

In view of the above Remarks, it is respectfully submitted that claims 1-9, 11-17, 19-22 and 25-38 are now in condition for allowance and the early issuance of this case is respectfully requested. In the event the Examiner wishes to contact the undersigned regarding any matter, please call (collect if necessary) the telephone number listed below.

Applicants believe there are no fees due for this Rule 111 Amendment. However, if the Examiner deems that fees are due, please charge these fees to Deposit Account No. 18-1982 for Aventis Pharmaceuticals Inc. Bridgewater, NJ. Please credit any overpayment to Deposit Account No. 18-1982.

Respectfully submitted,

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